

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: METALUX

Report Number: P234498

Luminaire Tested: **4WSNLED-LD4-32SL-F-UNV-L840-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P234498
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1707-169-11)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4WSNLED-LD4-32SL-F-UNV-L840-CD1-U
Description: 4FT WSNLED WRAPAROUND
Light Source: (224) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

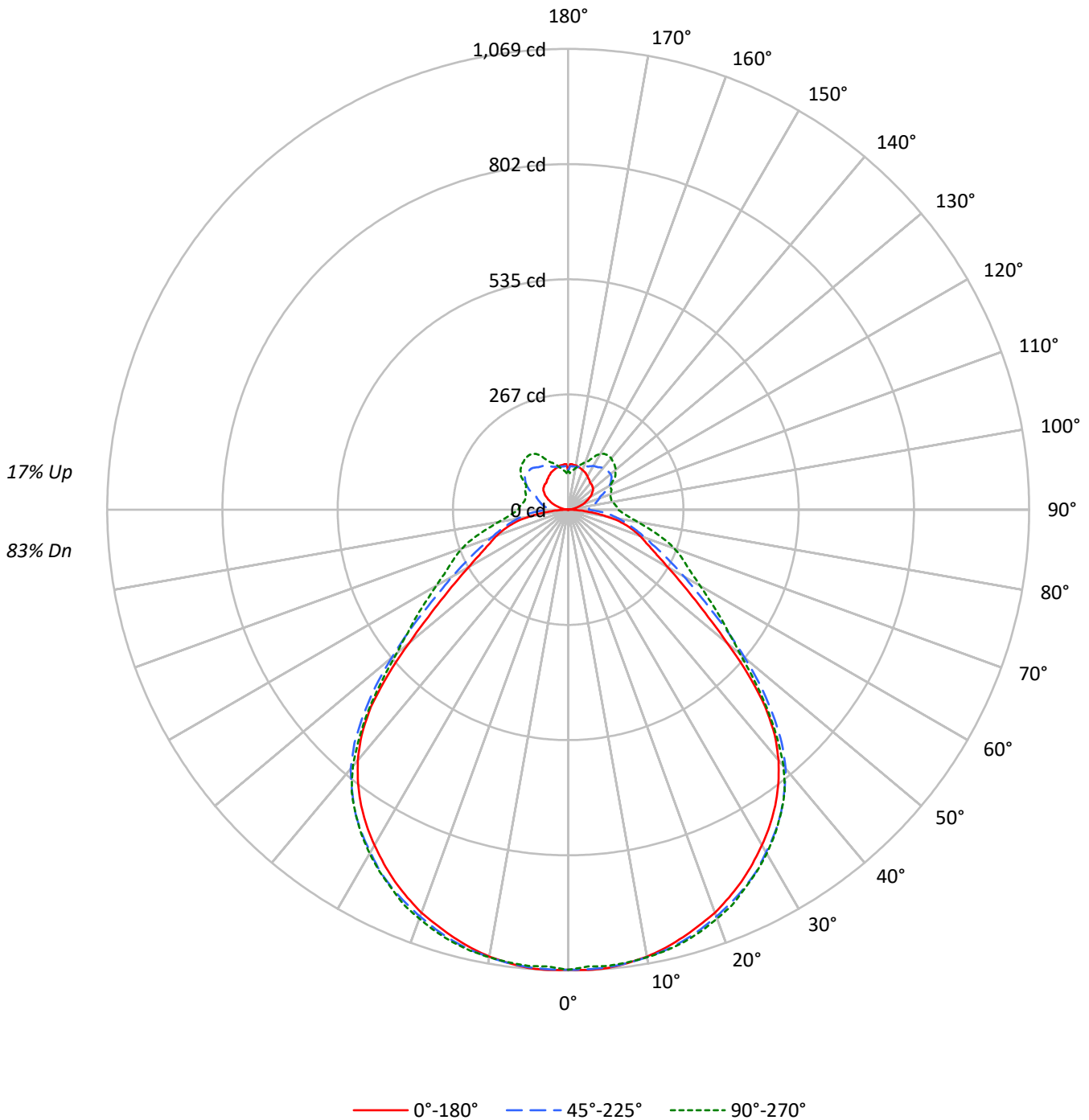
Lumens per Lamp: N/A
Luminaire Lumens: 3314.0 lumens
Efficiency: N/A
Efficacy: 116.7 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.35
Luminous Opening: Rectangular w/ Sides (W: 1' x L: 4' x H: 0.12')
CIE Type: Semi-Direct

Input Watts (W): 28.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	115	115	115	115	110	110	110	110	101	101	101	93	93	93	86	86	86	83
1	105	100	96	92	100	96	93	89	89	86	83	82	80	78	76	74	72	69
2	96	88	82	76	92	85	79	74	78	74	70	73	69	65	67	64	62	59
3	88	78	70	64	84	75	68	62	70	64	59	65	60	56	60	56	53	50
4	81	69	61	55	77	67	59	53	62	56	51	58	53	48	54	50	46	43
5	74	62	54	47	71	60	52	46	56	49	44	52	47	42	49	44	40	38
6	69	56	48	42	66	54	46	41	51	44	39	48	42	37	44	40	36	33
7	64	51	43	37	61	49	42	36	46	40	35	43	38	33	41	36	32	30
8	59	47	38	33	57	45	38	32	42	36	31	40	34	30	38	32	29	27
9	56	43	35	30	53	41	34	29	39	33	28	37	31	27	35	30	26	24
10	52	39	32	27	50	38	31	26	36	30	25	34	29	25	32	27	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2872	2872	2872
5°	2875	2850	2838
10°	2860	2826	2818
15°	2837	2801	2799
20°	2817	2765	2765
25°	2785	2732	2719
30°	2743	2681	2669
35°	2693	2623	2598
40°	2598	2522	2469
45°	2386	2298	2209
50°	1943	1977	1894
55°	1578	1639	1705
60°	1360	1399	1562
65°	1264	1239	1515
70°	1279	1143	1531
75°	1300	1110	1490
80°	1204	1131	1484
85°	876	1182	1693



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.2	3.1
10°-20°	291.5	8.8
20°-30°	443.5	13.4
30°-40°	531.9	16.0
40°-50°	506.3	15.3
50°-60°	360.5	10.9
60°-70°	245.1	7.4
70°-80°	165.4	5.0
80°-90°	94.8	2.9
90°-100°	61.2	1.8
100°-110°	68.9	2.1
110°-120°	85.6	2.6
120°-130°	98.2	3.0
130°-140°	93.4	2.8
140°-150°	75.6	2.3
150°-160°	52.1	1.6
160°-170°	29.3	0.9
170°-180°	9.4	0.3
0°-30°	836.2	25.2
0°-40°	1368.1	41.3
0°-60°	2234.9	67.4
0°-90°	2740.2	82.7
90°-120°	215.8	6.5
90°-150°	483.0	14.6
90°-180°	574.0	17.3
0°-180°	3314.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1067	1067	1067	1067	1067	
5°	1067	1061	1065	1064	1062	101
15°	1027	1025	1035	1040	1038	290
25°	952	953	968	971	969	438
35°	838	842	860	860	860	522
45°	647	663	671	671	653	489
55°	351	387	404	408	428	321
65°	212	226	241	255	302	213
75°	140	117	151	180	210	145
85°	38	55	87	120	133	43
90°	0	24	48	92	116	3
95°	3	22	50	93	111	4
105°	22	34	67	93	103	24
115°	46	74	92	103	111	46
125°	67	90	122	132	133	61
135°	79	95	128	148	151	61
145°	85	95	120	148	156	53
155°	95	96	111	128	132	43
165°	101	101	103	104	108	29
175°	106	106	101	88	90	10
180°	90	90	90	90	90	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1067.1	1067.1	1067.1	1067.1	1067.1
2.5°	1068.7	1063.8	1067.1	1067.1	1060.6
5°	1067.1	1060.6	1065.4	1063.8	1062.2
7.5°	1060.6	1055.8	1060.6	1062.2	1059.0
10°	1052.6	1047.8	1054.2	1055.8	1054.2
12.5°	1041.4	1038.2	1046.2	1049.4	1047.8
15°	1026.9	1025.3	1035.0	1039.8	1038.2
17.5°	1010.9	1009.3	1020.5	1026.9	1025.3
20°	994.8	993.2	1004.5	1009.3	1009.3
22.5°	974.0	974.0	986.8	991.6	993.2
25°	951.5	953.1	967.6	970.8	969.2
27.5°	925.8	927.5	945.1	946.7	946.7
30°	898.6	901.8	917.8	919.4	921.0
32.5°	869.7	872.9	890.5	890.5	892.2
35°	837.6	842.4	860.1	860.1	860.1
37.5°	800.7	807.1	823.2	823.2	824.8
40°	759.0	768.6	784.6	783.0	776.6
42.5°	709.2	722.1	733.3	731.7	717.3
45°	646.6	662.7	670.7	670.7	653.1
47.5°	566.4	590.5	604.9	598.5	584.1
50°	481.4	516.7	534.3	531.1	519.9
52.5°	409.2	449.3	466.9	465.3	468.5
55°	351.4	386.7	404.4	407.6	428.4
57.5°	304.9	337.0	351.4	361.0	386.7
60°	266.4	295.2	309.7	319.3	353.0
62.5°	235.9	258.3	272.8	284.0	324.1
65°	211.8	226.2	240.7	255.1	301.7
67.5°	192.6	195.8	211.8	232.7	282.4
70°	176.5	165.3	189.3	213.4	261.5
72.5°	158.9	139.6	170.1	194.2	237.5
75°	139.6	117.1	150.8	179.7	210.2
77.5°	118.7	97.9	134.8	163.7	184.5
80°	91.5	83.4	118.7	149.2	163.7
82.5°	64.2	69.0	102.7	136.4	146.0
85°	38.5	54.6	86.6	120.3	133.2
87.5°	17.7	40.1	65.8	104.3	123.6
90°	0.0	24.1	48.1	91.5	115.5
92.5°	1.6	24.1	48.1	93.1	113.9
95°	3.2	22.5	49.7	93.1	110.7
97.5°	6.4	22.5	54.6	91.5	107.5
100°	11.2	24.1	59.4	91.5	104.3
102.5°	16.0	25.7	64.2	93.1	102.7
105°	22.5	33.7	67.4	93.1	102.7
107.5°	28.9	44.9	72.2	94.7	102.7
110°	35.3	57.8	77.0	96.3	104.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	41.7	67.4	80.2	101.1	107.5
115°	46.5	73.8	91.5	102.7	110.7
117.5°	53.0	78.6	102.7	104.3	110.7
120°	57.8	83.4	110.7	110.7	112.3
122.5°	64.2	86.6	117.1	123.6	121.9
125°	67.4	89.9	121.9	131.6	133.2
127.5°	72.2	91.5	126.8	136.4	138.0
130°	75.4	93.1	128.4	141.2	144.4
132.5°	77.0	93.1	128.4	144.4	147.6
135°	78.6	94.7	128.4	147.6	150.8
137.5°	80.2	93.1	128.4	149.2	152.4
140°	80.2	93.1	126.8	149.2	155.6
142.5°	81.8	93.1	123.6	149.2	155.6
145°	85.0	94.7	120.3	147.6	155.6
147.5°	86.6	94.7	118.7	144.4	154.0
150°	89.9	94.7	117.1	139.6	149.2
152.5°	91.5	94.7	113.9	134.8	142.8
155°	94.7	96.3	110.7	128.4	131.6
157.5°	96.3	96.3	109.1	121.9	121.9
160°	97.9	97.9	105.9	115.5	117.1
162.5°	99.5	99.5	104.3	109.1	112.3
165°	101.1	101.1	102.7	104.3	107.5
167.5°	102.7	102.7	101.1	97.9	102.7
170°	104.3	104.3	101.1	93.1	97.9
172.5°	104.3	105.9	101.1	89.9	93.1
175°	105.9	105.9	101.1	88.3	89.9
177.5°	105.9	105.9	101.1	85.0	85.0
180°	89.9	89.9	89.9	89.9	89.9

(END OF REPORT)